GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:2379
ANSWERED ON:03.12.2002
INVESTMENT IN RESEARCH AND DEVELOPMENT
SULTAN SALAHUDDIN OWAISI;T.M. SELVAGANAPATHI

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the details of investment in research and development activities in science and technology over the past two five year plans;

(b) whether it is a fact that there has been a significant decline in India`s research and technology output in comparison to several other developing countries;

(c) if so, the reasons therefor;

(d) whether in terms of the research output, India fell from 8th place in 1980 to 13th in 1995 and is at present ranked 15th;

(e) if so, the reasons therefor;

(f) whether it is also a fact that the decline had taken place even while the number of universities in the country had doubled and the expenditure on research and development had gone up by almost 16 times;

g) if so, the fact thereof;

h) whether in the last 20 years, the number of scientific papers produced in India has gone down from 15,000 to 12,000;

i) if so, the reasons therefor; and

j) the steps being taken in this regard?

Answer

MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT)

a) to j) A statement is attached.

STATEMENT AS REFERRED IN REPLY TO PARTS a) to j) OF LOK SABHA UNSTARRED QUESTION NO. 2379 FOR 03.12 REGARDING `INVESTMENT IN RESEARCH AND DEVELOPMENT`.

The investment in Research and Development activities in Science and Technology during the Eight Five Year Plan was Rs. 34083.37 crores and it is estimated to be of the order of Rs.76950.43 crores during the Ninth Five Year Plan. This investment includes the R&D expenditures of Central and State Governments, R&D institutions, in-house R&D units of public and private sector and Scientific Industrial Research Organisations (SIRO) recognized by the Government.

The research output in India has not declined. In fact, the Scientific papers produced in India in the last 20 years have increased from 15034 in 1981 to 25339 in 2001. Even on the basis of Science Citation Index the Indian research output has gone up from 13119 in 1981 to 13425 in 2001, though, the number of journals covered has gone down from 34 in 1981 to 10 in 2001.

As per the Science Citation Index data base India`s rank was 8th in 1980, 14th in 1995 and 15th in 2000. However, comparison of research output on the basis of Science Citation Index database is not realistic as its coverage of journals for India is poor and has been inconsistent during the last two decades. At present the database covers 5600 S&T periodicals including only 10 from India. The number of Indian Journals covered in Science Citation Index has declined from 34 in 1981 to 11 in 1995 and to 10 in 2001.